

2. IN THE CLAIMS

This listing of claims will replace all prior versions, and listings of the claims in the application.

1. (Original) An isolated polynucleotide comprising:
 - (a) an isolated HSV LAT enhancer element;
 - (b) a first isolated LAT insulator/boundary region operably positioned upstream of said isolated LAT enhancer element; and
 - (c) a second isolated LAT insulatory/boundary region operably positioned downstream of said isolated LAT enhancer element.
2. (Currently Amended) The isolated polynucleotide ~~according to~~ claim 1, wherein said LAT enhancer element comprises a contiguous nucleotide sequence from an HSV LAT 5 exon.
3. (Currently Amended) The isolated polynucleotide ~~according to claim 1 or~~ claim 2, wherein said LAT enhancer element consists essentially of a contiguous nucleotide sequence from an HSV LAT 5 exon.

4. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 3, wherein said LAT enhancer element consists of a contiguous nucleotide sequence from an HSV LAT 5 exon.
5. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 1, wherein said LAT enhancer element comprises a contiguous nucleotide sequence from about nucleotide 118,975 to about ~~nucleotide~~nucleotide 120,471 of an HSV LAT 5 exon.
6. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 5, wherein said LAT enhancer element consists essentially of a contiguous nucleotide sequence from about nucleotide 118,975 to about ~~nucleotide~~nucleotide 120,471 of an HSV LAT 5 exon.
7. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 6, wherein said LAT enhancer element consists of a contiguous nucleotide sequence from about nucleotide 118,975 to about ~~nucleotide~~nucleotide 120,471 of an HSV LAT 5 exon.
8. (Canceled)

9. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 1, further comprising at least a first promoter region operably positioned upstream of said LAT enhancer element, and downstream of said first LAT insulator/boundary region.
10. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 9, wherein said promoter region comprises an HSV LAP1 promoter.
11. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 10, wherein said promoter region consists essentially of an HSV LAP1 promoter.
12. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 11, wherein said promoter region consists of an HSV LAP1 promoter.
13. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 9, wherein said promoter region comprises an HSV LAP1 promoter that comprises a sequence region of from about nucleotide 117,938 to about 118,843 of said HSV LAP1 promoter.

14. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 13, wherein said promoter region comprises an HSV LAP1 promoter that consists essentially of a sequence region of from about nucleotide 117,938 to about 118,843 of said HSV LAP1 promoter.
15. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 14, wherein said promoter region comprises an HSV LAP1 promoter that consists of a sequence region of from about nucleotide 117,938 to about 118,843 of said HSV LAP1 promoter.
16. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 15, wherein said promoter region comprises an HSV LAP1 promoter that consists of a sequence region of from nucleotide 117,938 to 118,843 of said HSV LAP1 promoter.
17. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 1, wherein said first LAT insulator/boundary region comprises a contiguous nucleotide sequence from an HSV insulator region or an HSV boundary region.

18. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 17, wherein said first LAT insulator/boundary region comprises a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of HSV1.
19. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 18, wherein said first LAT insulator/boundary region consists essentially of a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of HSV1.
20. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 19, wherein said first LAT insulator/boundary region consists of a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of HSV1.
21. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 20, wherein said first LAT insulator/boundary region consists of a contiguous nucleotide sequence from nucleotide 8365 to nucleotide 9273 of HSV1.
22. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~of claim 1, wherein said second LAT insulator/boundary region comprises a contiguous nucleotide sequence from an HSV insulator region or an HSV boundary region.

23. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 22, wherein said second LAT insulator/boundary region comprises a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of HSV1.
24. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 23, wherein said second LAT insulator/boundary region consists essentially of a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of HSV1.
25. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 24, wherein said second LAT insulator/boundary region consists of a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of HSV1.
26. (Currently Amended) The isolated polynucleotide of ~~according to any preceding~~ claim 25, wherein said second LAT insulator/boundary region consists of a contiguous nucleotide sequence from nucleotide 120,208 to nucleotide 120,940 of HSV1.

27. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 1, further comprising at least a first multiple cloning region operably positioned downstream of said first LAT insulator/boundary region and upstream of said LAT enhancer element.
28. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 27, wherein said first multiple cloning region further comprises a nucleic acid sequence that encodes a promoter or an enhancer sequence that is expressed in a mammalian host cell.
29. (Currently Amended) The isolated polynucleotide ~~according to any preceding~~ of claim 27, further comprising at least a second multiple cloning region operably positioned upstream of said second LAT insulator/boundary region and downstream of said LAT enhancer element.
30. (Currently Amended) The isolated polynucleotide ~~according to~~ of claim 29, wherein said second multiple cloning region further comprises at least a first nucleic acid sequence that encodes a therapeutic agent.

31. (Currently Amended) The isolated polynucleotide ~~according to claim 29 or of~~ claim 30, wherein said second multiple cloning region further comprises a nucleic acid sequence that encodes at least a first therapeutic agent selected from the group consisting of a peptide, a polypeptide, a ribozyme, a catalytic RNA molecule, an antisense oligonucleotide, and an antisense polynucleotide.
- 32.-45. (Canceled)
46. (Currently Amended) A viral vector, virion, or plurality of viral particles that comprises ~~comprising the isolated polynucleotide in accordance with any one of claims 1 to 39, or the vector in accordance with any one of claims 40 to 45 of claim 1 or claim 73.~~
47. (Currently Amended) The viral vector, virion, or plurality of viral particles ~~according to claim 43 of claim 46,~~ wherein said ~~vector comprises~~ vector, virion, or plurality of viral particles is of a retroviral, adenoviral, adeno-associated viral, or a herpes viral vector origin.
48. (Currently Amended) The viral vector, virion, or plurality of viral particles ~~according to claim 46 or of claim 47,~~ wherein said ~~vector is~~ comprising a gutless HSV vector, a gutless AV vector, a gutless AAV vector, a recombinant HSV vector, a recombinant AV vector, or a recombinant AAV vector.

49.-50. (Canceled)

51. (Currently Amended) An isolated mammalian host cell comprising that comprises:

- (a) the isolated polynucleotide of ~~any one of claims 1 to 39~~ claim 1 or claim 73; or
- (b) ~~the plasmid vector of any one of claims 40 to 45;~~
- ~~—— (c) —— the viral vector, virion, or plurality of viral particles of claim 46 any one of claims 46 to 48; or~~
- ~~—— (d) —— the plurality of AV, AAV or HSV particles of claim 49 or claim 50.~~

52.-53. (Canceled)

54. (Currently Amended) A pharmaceutical composition comprising the isolated polynucleotide of ~~any one of claims 1 to 39~~ claim 1 or claim 73, ~~the plasmid vector of any one of claims 40 to 45, or~~ the viral vector, virion, or plurality of viral particles of ~~any one of claims 46 to 48~~ claim 46 ~~the plurality of AV, AAV, or HSV particles of claim 49 or claim 50, or the host cell of any one of claims 51 to 53.~~

55.-69. (Canceled)

70. (Currently Amended) A method for providing a heterologous therapeutic gene to a mammalian host cell, said method comprising the step of: providing to a population of mammalian host cells an AV, HSV, or an AAV virion or viral particle that comprises the ~~vector of claim 45~~ isolated polynucleotide of claim 1 or claim 73, in an amount and for a time effective to provide said heterologous therapeutic gene to said population of mammalian cells.
71. (Currently Amended) A method for preventing, treating or ameliorating the symptoms of a disease, dysfunction, or deficiency in a mammal, said method comprising administering to said mammal the ~~vector of claim 45, the viral vector, virion, or viral particle of any one of claims 46 to 48, or the plurality of AV, AAV, or HSV particles of claim 49 or claim 50~~ pharmaceutical composition of claim 54, in an amount and for a time sufficient to treat or ameliorate the symptoms of said disease, dysfunction, or deficiency in said mammal.
72. (New) A recombinant viral vector comprising an isolated polynucleotide that comprises:
- (a) an isolated HSV LAT enhancer element, that comprises a contiguous nucleotide sequence from about nucleotide 118,975 to about nucleotide 120,471 of an HSV LAT 5 exon;

- (b) a first isolated LAT insulator/boundary region, that comprises a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of HSV1, operably positioned upstream of said isolated LAT enhancer element; and
 - (c) a second isolated LAT insulatory/boundary region, that comprises a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of HSV1, operably positioned downstream of said isolated LAT enhancer element.
73. (New) An isolated polynucleotide that comprises:
- (a) an isolated HSV LAT enhancer element, consisting essentially of a contiguous nucleotide sequence from about nucleotide 118,975 to about nucleotide 120,471 of an HSV LAT 5 exon;
 - (b) a first isolated LAT insulator/boundary region, consisting essentially of a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of HSV1, operably positioned upstream of said isolated LAT enhancer element; and
 - (c) a second isolated LAT insulatory/boundary region, consisting essentially of a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of HSV1, operably positioned downstream of said isolated LAT enhancer element.

74. (New) The isolated polynucleotide of claim 73, further comprising a first promoter region operably positioned upstream of said LAT enhancer element, and downstream of said first LAT insulator/boundary region.
75. (New) The isolated polynucleotide of claim 74, wherein said first promoter region consists essentially of a sequence region of from about nucleotide 117,938 to about 118,843 of an HSV LAP1 promoter.